CLAIMS

[1] A method for inducing differentiation of cardiomyocytes from stem cells, wherein

stem cells are cultured to induce differentiation in the presence of a substance that inihibits BMP signaling.

[2] The method according to Claim 1, wherein

culture of the stem cells to induce differentiation comprises a step of forming embryoid bodies by floating aggregation culture.

[3] The method according to Claim 1, wherein

culture of the stem cells to inducedifferentiation comprises a step of co-culturing with feeder cells.

[4] The method according to Claim 1, wherein

culture of the stem cells to inducedifferentiation comprises a step of plate culturing on a culture container.

[5] The method according to any one of Claims 1 through 4, comprising a step of treating the stem cells with the substance that inihibits BMP signaling during the first few days of the differentiation-inducing stage.

[6] The method according to any one of Claims 1 through 4, comprising a step of treating the stem cells with the substance that inihibits BMP signaling during pre-differentiation stage.

[7] The method according to any one of Claims 1 through 4, comprising a step of treating the stem cells with the substance that inihibits BMP signaling during pre-differentiation stage, and a step of treating the stem cells with the substance that inihibits BMP signaling

during the first few days of the differentiation-inducing stage.

[8] The method according to any one of Claims 1 through 7, wherein the substance that inihibits BMP signaling is a BMP antagonist.

[9] The method according to Claim 8, wherein the BMP antagonist is one or more selected from a group comprising Noggin, Chordin, fetuin, follistatin, sclerostin, DAN, Cerberus, gremlin, Dante and related proteins thereof.

[10] The method according to any one of Claims 1 through 9, wherein

the stem cells are mammalian-derived cells having the ability to differentiate into cardiomyocytes in vitro.

[11] The method according to Claim 10, wherein

the mammalian-derived cells having the ability to differentiate into cardiomyocytes are pluripotent stem cells or cells derived therefrom.

[12] The method according to Claim 11, wherein

the pluripotent stem cells are embryonic stem cells, cells with a similar morphology to embryonic stem cells, embryonic germ cells, or multipotent adult progenitor cells.

[13] The method according to Claim 12, wherein

the pluripotent stem cells are embryonic stem cells.

[14] Cardiomyocytes obtained by the method according to any one of Claims 1 through 13.